

IN THE CLAIMS

Please amend the claims as indicated below.

1. (Currently Amended) A method, performed on a computer system, for tracking time using speech recognition, the method comprising the steps of:
  - 5 accessing speech data;
  - recognizing at least two voice commands from the speech data, each voice command occurring at a different time;
  - 10 determining a first time associated with a speaking of a first of the voice commands, wherein said first voice command identifies a start of a time interval; and
    - 15 determining a second time associated with a speaking of a second of the voice commands, wherein said second voice command identifies an end of said time interval;  
~~converting each of the at least two voice commands to text; and~~  
~~determining text versions of the at least two voice commands by comparing words in the text with phrase grammar rules.~~
2. (Original) The method of claim 1, wherein the second voice command is implied because a predetermined time from the first voice command elapses before another voice command occurs or because a predetermined ending time occurs and there is no voice command after the first voice command but before the predetermined ending time, and wherein the step of determining a second time comprises the step of assigning the second time as the predetermined time plus the first time, if the first voice command elapses before another voice command occurs, or as the predetermined ending time, if the predetermined ending time occurs and there is no voice command after the first voice command but before the predetermined ending time.
3. (Currently Amended) The method of claim 1, wherein:
  - 30 the speech data comprises a time stamp;
  - the step of determining a first time comprises:

determining an offset time between the time stamp and a time when the first voice command is ~~active spoken~~; and

determining the first time through reference to the time stamp and the offset time.

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4. (Currently Amended) The method of claim 1, wherein:

the speech data comprises a time stamp;

the step of determining a first time comprises:

determining an offset time between the time stamp and a time when the first voice command is ~~active spoken~~; and

determining the first time through reference to the time stamp and the offset time; and

the step of determining a second time comprises:

determining a second offset time between the time stamp and a time when the second voice command is ~~active spoken~~; and

determining the second time through reference to the time stamp and the second offset time.

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5. (Original) The method of claim 4, wherein:

the step of determining the first time through reference to the time stamp and the offset time comprises the step of adding the offset time to the time stamp to determine the first time; and

the step of determining the second time through reference to the time stamp and the second offset time comprises the step of adding the second offset time to the time stamp to determine the second time.

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6. (Currently Amended) The method of claim 1, wherein:

the speech data comprises first and second time stamps;

the step of determining a first time comprises:

determining a first offset time between the first time stamp and a time when the first voice command is ~~active spoken~~; and

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determining the first time through reference to the first time stamp and the first offset time; and  
the step of determining a second time comprises:

5 determining a second offset time between the second time stamp and a time when the second voice command is active spoken; and

determining the second time through reference to the second time stamp and the second offset time.

7. (Original) The method of claim 1, further comprising the steps of:  
10 recording speech onto a portable recorder; and  
loading the speech data from the portable recorder to the computer system,  
the speech data comprising the speech and a plurality of time stamps.

8. (Previously Presented) The method of claim 1, further comprising the step  
15 of:  
determining at least one task name from the text of the at least two voice commands.

9. (Canceled)

20 10. (Original) The method of claim 8, wherein the step of determining at least one task name comprises finding the at least one task name in the text.

11. (Currently Amended) The method of claim 8, wherein the step of  
25 determining at least one task name comprises associating at least one task name to said time interval ~~a time period~~ between the first and second times, wherein the at least one task name is not in the text.

12. (Original) The method of claim 8, wherein the at least one task name  
30 comprises two task names, a first task name associated with a first of the voice commands and a second task name associated with a second of the voice commands,

wherein the first and second voice commands occur adjacent to each other in time, wherein the first and second task name are different, and wherein the second voice command is assumed to end a first task corresponding to the first task name and start a second task corresponding to the second task name.

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13. (Original) The method of claim 8, further comprising the step of packaging the first time, second time, and one task name from the at least one task name into a time increment.

10 14. (Original) The method of claim 8, wherein the at least two voice commands comprises a plurality of voice commands, wherein the at least one task name comprises a plurality of task names, and wherein the method further comprises the steps of:

15 determining an additional plurality of voice command times, each of the voice command times associated with one of the plurality of additional voice command times;

converting each of the plurality of voice commands to text;

determining a plurality of task names from the text;

20 associating a task name with two of the first time, second time, or additional plurality of voice command times;

creating a plurality of time increments, each time increment comprising two times of the first time, second time, or additional plurality of voice command times and a task name; and

storing the plurality of time increments.

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15. (Currently Amended) A method, performed on a computer system, for tracking time using speech recognition, the method comprising the steps of:

accessing speech data comprising a plurality of time stamps and speech;

converting the speech to text;

30 composing a plurality of voice commands from words in the text, each voice command corresponding to a phrase grammar rule;

determining a time associated with a speaking of each of the voice commands;

determining a plurality of tasks, each task associated with at least one of the times and at least one of the voice commands; and

5 determining a plurality of time increments, each time increment comprising one of the tasks and at least one of the times.

16. (Original) The method of claim 15, wherein the step of determining a plurality of tasks comprises determining a task name for each of the plurality of tasks, 10 wherein first and second voice commands occur adjacent to each other in time, wherein a first task name is associated with the first voice command and a second task name is associated with the second command, wherein the first and second task name are different, and wherein the second voice command is assumed to end a first task corresponding to the first task name and start a second task corresponding to the second 15 task name.

17. (Currently Amended) The method of claim 15, wherein:

the speech data comprises a first time stamp;

the step of determining a time comprises:

20 determining a first offset time between the first time stamp and a time when the first voice command is active spoken; and

determining the first time through reference to the first time stamp and the first offset time.

25 18. (Original) The method of claim 15, further comprising the steps of: recording speech onto a portable recorder; and loading the speech data from the portable recorder to the computer system, the speech data comprising the speech and the plurality of time stamps.

30 19. (Currently Amended) A system for tracking time using speech recognition, the system comprising:

a computer system comprising:  
a memory that stores computer-readable code; and  
a processor operatively coupled to the memory, the processor configured to implement the computer-readable code, the computer-readable code configured to:

5 access speech data;  
recognize at least two voice commands from the speech data, each voice command occurring at a different time;

10 10 determine a first time associated with a speaking of a first of the voice commands, wherein said first voice command identifies a start of a time interval;

determine a second time associated with a speaking of a second of the voice commands, wherein said second voice command identifies an end of a time interval;

15 convert each of the at least two voice commands to text;  
and

determine text versions of the at least two voice commands by comparing words in the text with phrase grammar rules.

20. 20. (Currently Amended) The system of claim 19, wherein the speech data comprises a time stamp, and wherein the computer-readable code is further configured to:  
when determining a first time:

determining an offset time between the time stamp and a time when the first voice command is active spoken; and

25 determining the first time through reference to the time stamp and the offset time; and

when determining a second time:

determining a second offset time between the time stamp and a time when the second voice command is active spoken; and

30 determining the second time through reference to the time stamp and the second offset time.

21. (Original) The system of claim 19, wherein the computer-readable code is further configured to:

store the time increments; and

place the time increments into a file having a format suitable for importing  
5 into a time and billing program.

22. (Original) The system of claim 19, wherein the system further comprises a digital personal recorder and wherein the computer-readable code is further configured to receive the speech data from the digital personal recorder.

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23. (Canceled)

24. (Currently Amended) A system for tracking time using speech recognition, the system comprising:

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a computer system comprising:

a memory that stores computer-readable code; and

a processor operatively coupled to the memory, the processor configured to implement the computer-readable code, the computer-readable code configured to:

access speech data comprising a plurality of time stamps and speech;

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convert the speech to text;

compose a plurality of voice commands from words in the text, each voice command corresponding to a phrase grammar rule;

determine a time associated with a speaking of each of the voice commands;

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determine a plurality of tasks, each task associated with at least one of the times and at least one of the voice commands; and

determine a plurality of time increments, each time increment comprising one of the tasks and at least one of the times.

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25. (Original) The system of claim 24, wherein the computer-readable code is further configured to:

store the time increments; and  
place the time increments into a file having a format suitable for importing  
into a time and billing program.

5 26. (Original) The system of claim 24, wherein the system further comprises a  
digital personal recorder and wherein the computer-readable code is further configured to  
receive the speech data from the digital personal recorder.

27. (Currently Amended) An article of manufacture comprising:  
10 a computer readable medium having computer readable code means  
embodied thereon, the computer readable program code means comprising:

a step to access speech data;  
a step to recognize at least two voice commands from the speech data,  
each voice command occurring at a different time;

15 a step to determine a first time associated with a speaking of a first of the  
voice commands, wherein said first voice command identifies a start of a time interval;  
a step to determine a second time associated with a speaking of a second  
of the voice commands, wherein said second voice command identifies an end of a time  
interval;

20 a step to convert each of the at least two voice commands to text; and  
a step to determine text versions of the at least two voice commands by  
comparing words in the text with phrase grammar rules.

28. (Currently Amended) An article of manufacture comprising:  
25 a computer readable medium having computer readable code means  
embodied thereon, the computer readable program code means comprising:

a step to access speech data comprising a plurality of time stamps and  
speech;  
a step to convert the speech to text;  
30 a step to compose a plurality of voice commands from words in the text,  
each voice command corresponding to a phrase grammar rule;

a step to determine a time associated with a speaking of each of the voice commands;

a step to determine a plurality of tasks, each task associated with at least one of the times and at least one of the voice commands; and

5 a step to determine a plurality of time increments, each time increment comprising one of the tasks and at least one of the times.

29. (New) The method of claim 8, further comprising the step of determining text versions of the at least two voice commands by comparing words in the text with  
10 phrase grammar rules.

30. (New) The system of claim 19, wherein the computer-readable code is further configured to:

convert each of the at least two voice commands to text; and

15 determine text versions of the at least two voice commands by comparing words in the text with phrase grammar rules.